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SPEECHES BY U.S. GOVERNMENT OFFICIALS:

REMARKS AT THE STATE DEPARTMENT'S "GREENING DIPLOMACY" EARTH DAY EVENT
Hillary Rodham Clinton, U.S. Secretary of State. Dean Acheson Auditorium, Washington, DC. April 22, 2009.
http://www.state.gov/secretary/rm/2009a/04/122064.htm
We're trying to green diplomacy and we want to do it every day, not just on Earth Day. That starts with our foreign policy, and accepting that climate change is more than a scientific phenomenon. It's a political challenge, it's an economic force, it's a security threat, and a moral imperative. We've already seen the results of climate change, which has, because of rising waters, because of desertification, displaced communities, and jeopardized food and water supplies, helped to spread epidemics and threatened the continued existence of island nations. So we know climate change has to be an urgent challenge that we work at the highest levels of our government to address. But that's not enough. What we are trying to do today is to bring the message home to individuals, to embassies, to the State Department, and across the world that our goal is to make climate change, the greening of the world, a responsibility that starts with each and every one of us.

ARCTIC FISHERIES IN FOCUS
David A. Balton, Deputy Assistant Secretary. Bureau of Oceans and International Environmental and Scientific Affairs. U.S. Department of State. Washington, DC. March 4, 2009.
http://www.state.gov/g/oes/rls/remarks/2009/120168.htm
The Arctic is changing in many ways, primarily because the climate is warming. The Arctic region is warming faster than other areas of the planet, and this has consequences for the fish in the area and for possible future fisheries in the Arctic. So as the ice recedes and the waters of the Arctic Ocean warm, we anticipate that stocks will be moving in more northerly areas, and we think it's important to start now with other responsible governments to plan for managing future fisheries in the Arctic that don't exist today.

KEYNOTE REMARKS AT U.S. CLIMATE ACTION SYMPOSIUM
Todd Stern, Special Envoy for Climate Change. U.S. Department of State. Senate Hart Office Building, Washington, DC. March 3, 2009.
http://www.state.gov/g/oes/rls/remarks/2009/119983.htm
The U.S. is in the game. We are seized by the importance and urgency of the task. The President has made the transformation to a low-carbon economy a core part of his domestic agenda. And we are eager to get a strong new international agreement done in Copenhagen. What's more, the President has put together a terrific team of people to work on the climate/energy challenge, including Steven Chu, John Holdren, Carol Browner, Lisa Jackson, Nancy Sutley and many others. It is of course, a vital thing that

the United States is back, because the seriousness of the climate problem becomes more stark and disturbing with each passing year.

INTERVENTION ON MERCURY
Daniel A. Reifsnyder, Deputy Assistant Secretary. Bureau of Oceans and International Environmental and Scientific Affairs. U.S. Department of State. Committee of the Whole 25th Governing Council United Nations Environment Programme, Nairobi, Kenya. February 16, 2009.
http://www.state.gov/g/oes/rls/remarks/2009/117504.htm
The United States has made great strides in addressing mercury contamination at home. In recognition of the importance of this issue, in 2008, under the leadership of our now President Obama, the United States' Congress passed The Mercury Export Ban Act to ban exports of elemental mercury beginning in 2013. Neither the United States, nor any other country, however, can achieve sufficient reductions of mercury risks to protect the health of its citizens without serious cooperation internationally to reduce global mercury emissions.

GOVERNMENT DOCUMENTS:

INVENTORY OF U.S. GREENHOUSE GAS EMISSIONS AND SINKS: 1990-2007
U.S. Environmental Protection Agency (EPA). April 15, 2009. 441 pages.
http://epa.gov/climatechange/emissions/downloads09/InventoryUSGhG1990-2007.pdf
An emissions inventory that identifies and quantifies a country's primary anthropogenic sources and sinks of greenhouse gases is essential for addressing climate change. This inventory adheres to both a comprehensive and detailed set of methodologies for estimating sources and sinks of anthropogenic greenhouse gases, and a common and consistent mechanism that enables Parties to the United Nations Framework Convention on Climate Change (UNFCCC) to compare the relative contribution of different emission sources and greenhouse gases to climate change.

HOW CBO ESTIMATES THE COSTS OF REDUCING GREENHOUSE-GAS EMISSIONS
Congressional Budget Office (CBO). Background Paper. April 2009. 32 pages.
http://www.cbo.gov/ftpdocs/99xx/doc9923/04-24-Greenhouse.pdf
In recent years, a number of legislative proposals have involved efforts to restrict emissions of greenhouse gases in the United States. To estimate the budgetary impact of such proposals on the federal budget, CBO must estimate the marginal, or incremental, cost of reducing emissions of a number of different greenhouse gases at various levels of mitigation and at different points in the future. This background paper describes CBO's methodological approach to estimating such costs, the sources of data and analysis used to develop that approach, and the rationale for using it.

FLEXIBILITY IN THE TIMING OF EMISSION REDUCTIONS UNDER A CAP-AND-TRADE PROGRAM
Douglas W. Elmendorf, Director. Congressional Budget Office (CBO). Testimony before the Committee on Ways and Means, U.S. House of Representatives. March 26, 2009. 17 pages.
http://www.cbo.gov/ftpdocs/100xx/doc10020/03-26-Cap-Trade_Testimony.pdf

Many analysts agree that the most cost-effective way to spur significant changes in the production and use of energy is to put a price on carbon emissions. By establishing such a price -- rather than by dictating specific technologies or changes in behavior -- the government would encourage households and firms to reduce emissions in the least costly ways. Either a carbon tax or a cap-and-trade program would effectively put a price on carbon emissions and lead to emission reductions where and how it was least costly to achieve them. Allowing flexibility about when emissions were reduced would further lower the costs -- and would do so without lowering the benefits -- because climate change depends not on the amount of greenhouse gases released in a given year but on their buildup in the atmosphere over decades.

CLIMATE CHANGE: OBSERVATIONS ON FEDERAL EFFORTS TO ADAPT TO A CHANGING CLIMATE

John B. Stephenson, Director, Natural Resources and Environment. Government Accountability Office (GAO). Testimony before the Subcommittee on Energy and Environment, Committee on Energy and Commerce, U.S. House of Representatives. March 25, 2009. 14 pages.

http://www.gao.gov/new.items/d09534t.pdf

Federal, state, and local agencies are tasked with a wide array of responsibilities that could be affected by a changing climate, such as managing natural resources. For example, climate change could threaten coastal areas with rising sea levels, alter agricultural productivity, and increase the intensity and frequency of floods and storms. Furthermore, climate change could increase the cost of federal programs, such as crop and flood insurance, and place new stresses on infrastructure. Greenhouse gases already in the atmosphere will continue altering the climate system into the future regardless of emissions control efforts. Therefore, adaptation -- defined as adjustments to natural or human systems in response to actual or expected climate change -- is an important part of the response to climate change. This testimony summarizes GAO's prior and ongoing work examining actions that federal, state, local, and international authorities are taking to adapt to a changing climate, the challenges that federal, state, and local officials face in their efforts to adapt, and actions that the Congress and federal agencies could take to help address these challenges.

U.S. DEPARTMENT OF AGRICULTURE: IMPROVED MANAGEMENT CONTROLS CAN ENHANCE EFFECTIVENESS OF KEY CONSERVATION PROGRAMS

Lisa Shames, Director, Natural Resources and Environment. Government Accountability Office (GAO). Testimony before the Subcommittee on Conservation, Credit, Energy, and Research, Committee on Agriculture, U.S. House of Representatives. March 25, 2009. 19 pages.

http://www.gao.gov/new.items/d09528t.pdf

The U.S. Department of Agriculture (USDA) administers conservation programs, such as the Conservation Stewardship Program (CSP, formerly the Conservation Security Program) and the Environmental Quality Incentives Program (EQIP), to help farmers reduce soil erosion, enhance water supply and quality, and increase wildlife habitat, among other things. This testimony discusses the potential for duplicate payments between CSP and other conservation programs, USDA's process for allocating EQIP funds to the states to optimize environmental benefits, and USDA's management controls over farm program payments.

THE DISTRIBUTIONAL CONSEQUENCES OF A CAP-AND-TRADE PROGRAM FOR CO2 EMISSIONS

Terry M. Dinan, Senior Advisor. Congressional Budget Office (CBO). Testimony before the Subcommittee on Income Security and Family Support, Committee on Ways and Means, U.S. House of Representatives. March 12, 2009. 20 pages.
http://www.cbo.gov/ftpdocs/100xx/doc10018/03-12-ClimateChange_Testimony.pdf
One option for reducing CO2 emissions in a cost-effective manner is to establish a carefully designed cap-and-trade program. Under such a program, the government would set gradually tightening limits on emissions, issue rights (or allowances) consistent with those limits, and then allow firms to trade the allowances among themselves. The net financial impact of such a program on low- and moderate-income households would depend in large part on how the value of emission allowances was allocated. By itself, a cap-and-trade program would lead to higher prices for energy and energy-intensive goods. Those price increases would impose a larger burden on low- and moderate income households than on higher-income households, relative to either their income or total spending. Lawmakers could choose to offset the price increases experienced by low- and moderate-income households by providing for the sale of some or all of the CO2 emission allowances and using the revenues to compensate such households.

CLIMATE CHANGE: CURRENT ISSUES AND POLICY TOOLS
Jane A. Leggett. Congressional Research Service (CRS). March 6, 2009. 32 pages..
http://assets.opencrs.com/rpts/RL34513_20090306.pdf
On June 2, 2008, the Senate agreed to consider a bill (S. 3036) to control greenhouse gas emissions in the United States. In the 111th Congress, leaders in both chambers have announced their intentions to pass bills in 2009 to reduce greenhouse gas emissions. These actions are indicative of the pressures Members of Congress increasingly face on whether and how to address human-induced climate change. Contentious debates scrutinize issues of science, economics, values, geopolitics and a host of other concerns. Deliberations also weigh the appropriateness of alternative policy tools and program designs. The economic stakes are potentially large -- with both the costs of controls and the "costs of inaction" ranging, by some estimates, into trillions of dollars over several decades.

CLIMATE CHANGE: OBSERVATIONS ON THE POTENTIAL ROLE OF CARBON OFFSETS IN CLIMATE CHANGE LEGISLATION
John B. Stephenson, Director, Natural Resources and Environment. Government Accountability Office (GAO). Testimony before the Subcommittee on Energy and Environment, Committee on Energy and Commerce, U.S. House of Representatives. March 5, 2009. 22 pages.
http://www.gao.gov/new.items/d09456t.pdf
Carbon offsets -- reductions of greenhouse gas emissions from an activity in one place to compensate for emissions elsewhere -- can reduce the cost of regulatory programs to limit emissions because the cost of creating an offset may be less than the cost of requiring entities to make the reductions themselves. To be credible, however, an offset must be additional -- it must reduce emissions below the quantity emitted in a business-as-usual scenario -- among other criteria. In the U.S., there are no federal requirements to limit emissions and offsets may be purchased in a voluntary market. Outside the U.S., offsets may be purchased on compliance markets to meet requirements to reduce emissions. Congress is considering adopting a market-based cap-and-trade program to limit greenhouse gas emissions. Such a program would create a price on emissions based on the supply and demand for allowances to emit. Under such a program, regulated entities could potentially substitute offsets for on-site emissions reductions, thereby lowering their compliance costs. This testimony summarizes GAO's prior work examining the challenges in ensuring the quality of carbon offsets in the voluntary market; the effects of and lessons

learned from the Clean Development Mechanism (CDM), an international offset program; and matters that the Congress may wish to consider when developing regulatory programs to limit emissions.

GREEN JOBS: A PATHWAY TO A STRONG MIDDLE CLASS
The Vice President of the United States. White House Task Force on the Middle Class. Staff Report. February 27, 2009. 34 pages.
http://www.whitehouse.gov/assets/documents/mctf_one_staff_report_final.pdf
The White House Task Force on the Middle Class has a simple mandate: to find, highlight, and implement solutions to the economic challenges facing the American middle class. Green jobs have the potential to be quality, family-sustaining jobs that also help improve the environment. They are largely domestic jobs that can't be offshored. They tend to pay more than other jobs, even controlling for worker characteristics. Moreover, green jobs are an outgrowth of a larger movement to reform the way we create and use energy in both this country and the rest of the world. They represent a growth sector, and one that offers the dual promise of providing good jobs while meeting the environmental challenge to reduce our dependence on finite fossil fuels that generate harmful carbon emissions.

CHEMICAL REGULATION: OPTIONS FOR ENHANCING THE EFFECTIVENESS OF THE TOXIC SUBSTANCES CONTROL ACT
John B. Stephenson, Director, Natural Resources and Environment. Government Accountability Office (GAO). Testimony before the Subcommittee on Commerce, Trade, and Consumer Protection, Committee on Energy and Commerce, U.S. House of Representatives. February 26, 2009. 20 pages.
http://www.gao.gov/new.items/d09428t.pdf
Congress passed the Toxic Substances Control Act (TSCA) in 1976, authorizing the Environmental Protection Agency (EPA) to obtain information on the risks of industrial chemicals and to control those that EPA determines pose an unreasonable risk. EPA does not, however, have sufficient chemical assessment information to determine whether it should establish controls to limit public exposure to many chemicals that may pose substantial health risks. In reports on TSCA, GAO has recommended statutory changes to, among other things, provide EPA with additional authorities to obtain health and safety information from the chemical industry and to shift more of the burden to chemical companies for demonstrating the safety of their chemicals. This testimony addresses EPA's implementation of TSCA and options for obtaining information on the risks posed by chemicals to human health and the environment, controlling these risks, and publicly disclosing information provided by chemical companies under TSCA.

UPDATE ON THE LATEST GLOBAL WARMING SCIENCE
Howard Frumkin, Director. National Center for Environmental Health. Centers for Disease Control and Prevention and Agency for Toxic Substances and Disease Registry. U.S. Department of Health and Human Services. Testimony before the Committee on Energy and Public Works, U.S. Senate. February 25, 2009. 16 pages.
http://epw.senate.gov/public/index.cfm?FuseAction=Files.View&FileStore_id=aefa9ec4-cb40-449e-a5d0-b5660a508f90
The Centers for Disease Control and Prevention consider climate change a serious public health concern. An effective public health response to climate change can prevent injuries, illnesses, and death while enhancing overall public health preparedness. The following dimensions of climate change and public health are discussed in this testimony: the likely public health threats of climate change; the people most

vulnerable to these threats; and public health actions needed to protect the public′s health from these anticipated threats.

CLIMATE CHANGE SCIENCE: HIGH QUALITY GREENHOUSE GAS EMISSIONS DATA ARE A CORNERSTONE OF PROGRAMS TO ADDRESS CLIMATE CHANGE
John B. Stephenson, Director, Natural Resources and Environment. Government Accountability Office (GAO). Testimony before the Subcommittee on Energy and Environment, Committee on Science and Technology, U.S. House of Representatives. February 24, 2009. 15 pages.
http://www.gao.gov/new.items/d09423t.pdf
The United States Congress is considering proposals to limit greenhouse gas emissions using market-based mechanisms that would place a price on emissions. Such programs would create an economic incentive for regulated entities to limit their emissions. Limiting greenhouse gas emissions requires an understanding of existing emissions as well as the development of a program to monitor, report, and verify emissions from entities that might be affected by a future regulatory program. A greenhouse gas mitigation program also requires an understanding of the numerous emissions sources and methods for calculating emissions of six major greenhouse gases -- carbon dioxide, methane, nitrous oxide, and several synthetic gases. This testimony focuses on the importance of quality data on emissions in the context of a program intended to limit greenhouse gas emissions, and key considerations in developing reliable data on greenhouse gas emissions.

CARBON TAX AND GREENHOUSE GAS CONTROL: OPTIONS AND CONSIDERATIONS FOR CONGRESS
Jonathan L. Ramseur and Larry Parker. Congressional Research Service (CRS). February 23, 2009. 51 pages.
http://assets.opencrs.com/rpts/R40242_20090223.pdf
Market-based mechanisms that limit greenhouse gas (GHG) emissions can be divided into two types: quantity control (e.g., cap-and-trade) and price control (e.g., carbon tax or fee). To some extent, a carbon tax and a cap-and-trade program would produce similar effects: both are estimated to increase the price of fossil fuels, which would ultimately be borne by consumers, particularly households. Although there are multiple tools available to policymakers that could control GHG emissions -- including existing statutory authorities -- this report focuses on a carbon tax approach and how it compares to its more frequently discussed counterpart: cap-and-trade. If policymakers had perfect information regarding the market, either a price (carbon tax) or quantity control (cap-and-trade system) instrument could be designed to achieve the same outcome. Because this market ideal does not exist, preference for a carbon tax or a cap-and-trade program ultimately depends on which variable one wants to control -- emissions or costs. Although there are several design mechanisms that could blur the distinction, the gap between price control and quantity control can never be completely overcome.

EPA CAN IMPROVE IMPLEMENTATION OF THE RISK MANAGEMENT PROGRAM FOR AIRBORNE CHEMICAL RELEASES
Office of Inspector General. U.S. Environmental Protection Agency (EPA). Report No. 09-P-0092. February 10, 2009. 50 pages.
http://www.epa.gov/oigearth/reports/2009/20090210-09-P-0092.pdf
The purpose of the Risk Management Program under Section 112(r) of the Clean Air Act is to reduce the likelihood of airborne chemical releases that could harm the public, and mitigate the consequences of

releases that do occur. Under this program, stationary sources that have more than the threshold quantity of regulated substances on-site in any one process must implement a risk management program. All covered facilities must submit a Risk Management Plan (RMP) to EPA that describes and documents the facility's hazard assessment, and its prevention and response programs. Facilities must update and re-submit these plans at least every 5 years and when changes occur. EPA can improve its program management and oversight to better assure that facilities covered by the Clean Air Act's Risk Management Program submit or re-submit an RMP. EPA can also strengthen its inspection process to provide greater assurance that facilities comply with Risk Management Program requirements.

NUCLEAR WASTE DISPOSAL: ALTERNATIVES TO YUCCA MOUNTAIN
Mark Holt. Congressional Research Service (CRS). February 6, 2009. 27 pages.
http://assets.opencrs.com/rpts/R40202_20090206.pdf
Congress designated Yucca Mountain, NV, as the nation's sole candidate site for a permanent high-level nuclear waste repository in 1987, following years of controversy over the site-selection process. Over the strenuous objections of the State of Nevada, the Department of Energy (DOE) submitted a license application for the proposed Yucca Mountain repository in June 2008 to the Nuclear Regulatory Commission (NRC). During the 2008 election campaign, now-President Obama lent support to Nevada's fight against the repository, contending in an issue statement that he and now-Vice President Biden "do not believe that Yucca Mountain is a suitable site." Current law provides no alternative repository site to Yucca Mountain, and it does not authorize DOE to open temporary storage facilities without a permanent repository in operation. Without congressional action, therefore, the default alternative to Yucca Mountain would be indefinite onsite storage of nuclear waste at reactor sites and other nuclear facilities. Private central storage facilities can also be licensed under current law; such a facility has been licensed in Utah but its operation has been blocked by the Department of the Interior.

ENVIRONMENTAL QUALITY INCENTIVES PROGRAM (EQIP): STATUS AND ISSUES
Megan Stubbs. Congressional Research Service (CRS). February 5, 2009. 12 pages.
http://assets.opencrs.com/rpts/R40197_20090205.pdf
The Environmental Quality Incentives Program (EQIP) is a voluntary program that provides farmers with financial and technical assistance to plan and implement soil and water conservation practices. EQIP is the largest agriculture conservation financial assistance program for working lands. EQIP was first authorized in 1996 and was most recently revised by Section 2501 of the Food, Conservation, and Energy Act of 2008 (P.L. 110-246, the 2008 farm bill). It is a mandatory spending program (i.e., not subject to annual appropriations) and is administered by the U.S. Department of Agriculture's (USDA's) Natural Resources Conservation Service (NRCS). Funding is currently authorized to grow to $1.75 billion in FY2012. Eligible land includes cropland, rangeland, pasture, non-industrial private forestland, and other land on which resource concerns related to agricultural production could be addressed through an EQIP contract. With the 111th Congress facing tighter budget constraints, EQIP could face similar challenges with a potential reduction in mandatory funding levels and a continuing backlog of unfunded applications. A change in income limitations along with a new waiver created in the 2008 farm bill could also raise issues for the program. EQIP will also continue to face challenges in measuring environmental and program accomplishments.

INTERNATIONAL ILLEGAL TRADE IN WILDLIFE: THREATS AND U.S. POLICY

Liana Sun Wyler and Pervaze A. Sheikh. Congressional Research Service (CRS). February 2, 2009. 45 pages.
http://assets.opencrs.com/rpts/RL34395_20090202.pdf
Global trade in illegal wildlife is a growing illicit economy, estimated to be worth at least $5 billion and potentially in excess of $20 billion annually. Some of the most lucrative illicit wildlife commodities include tiger parts, caviar, elephant ivory, rhino horn, and exotic birds and reptiles. Demand for illegally obtained wildlife is ubiquitous, and some suspect that illicit demand may be growing. The role of Congress in evaluating U.S. policy to combat wildlife trafficking is broad. Potential issues for Congress include determining funding levels for U.S. wildlife trade inspection and investigation; evaluating the effectiveness of U.S. foreign aid to combat wildlife trafficking; developing ways to encourage private-sector involvement in regulating the wildlife trade; using trade sanctions to penalize foreign countries with weak enforcement of wildlife laws; incorporating wildlife trade provisions into free trade agreements; and addressing the domestic and international demand for illegal wildlife through public awareness campaigns and non-governmental organization partnerships. This report focuses on the international trade in terrestrial fauna, largely excluding trade in illegal plants, including timber, and fish.

CLIMATE CHANGE AND WATER RESOURCES MANAGEMENT: A FEDERAL PERSPECTIVE
U.S. Geological Survey. U.S. Department of the Interior. February 2009. 76 pages.
http://pubs.usgs.gov/circ/1331/Circ1331.pdf
Climate change has the potential to affect many sectors in which water resource management plays an active role, including water availability, water quality, flood risk reduction, ecosystems, coastal areas, navigation, hydropower, and other energy sectors. These changes may have adverse or positive impacts on one or more sectors. Other processes (for example, change in population size and location, economic development and land use, aging infrastructure, ground-water development, and changing social values) also have major influences on water resources and must be considered along with climate change in a holistic approach to water resources management. The purpose of this interagency report prepared by the U.S. Geological Survey (USGS), U.S. Army Corps of Engineers (USACE), Bureau of Reclamation (Reclamation), and National Oceanic and Atmospheric Administration (NOAA) is to explore strategies to improve water management by tracking, anticipating, and responding to climate change.

U.S. GLOBAL CLIMATE CHANGE POLICY: EVOLVING VIEWS ON COSTS, COMPETITIVENESS, AND COMPREHENSIVENESS
Larry Parker and John Blodgett. Congressional Research Service (CRS). January 29, 2009. 21 pages.
http://assets.opencrs.com/rpts/RL30024_20090129.pdf
Momentum for action toward global climate change may be accelerating: the Senate in 2005 passed a Sense of the Senate resolution that Congress should proceed with mandatory, market-based limits and incentives on greenhouse gases. President Obama, in his campaign, pledged to "implement an economy-wide cap-and-trade program to reduce greenhouse gas emissions 80 percent by 2050." Since inauguration, his personnel selections and his directive that EPA reconsider its decision to disallow a California waiver so it could regulate carbon dioxide emissions from autos suggest that he intends to carry through on greenhouse gas emission controls. Key committees and Members of the 111th Congress have also been preparing to move on climate change initiatives. But concerns about cost, competitiveness and comprehensiveness continue to ensure debate. If one believes that the costs of greenhouse gas reductions are modest, action to reduce emissions poses little risk. If one perceives substantial costs from reducing carbon emissions, however, the uncertainty about any benefits raises serious questions as to the prudence of such action. This clash of perspectives is likely to ensure that,

along with scientific uncertainty and current economic conditions, cost, competitiveness and comprehensiveness remain pivotal issues.

CLEAN AIR ACT: HISTORICAL INFORMATION ON EPA'S PROCESS FOR REVIEWING CALIFORNIA WAIVER REQUESTS AND MAKING WAIVER DETERMINATIONS
Government Accountability Office (GAO). Report to Congressional Requesters. January 16, 2009. 10 pages.
http://www.gao.gov/new.items/d09249r.pdf
Emissions from mobile sources, such as automobiles and trucks, contribute to air quality degradation and can threaten public health and the environment. Under the Clean Air Act, the Environmental Protection Agency (EPA) regulates these emissions. The act generally allows one set of federal standards for new motor vehicle emissions and pre-empts states from adopting or enforcing their own standards. It also, however, authorizes the EPA Administrator to waive this provision to allow the state of California to enact and enforce emission standards for new motor vehicles that are as protective, in the aggregate, as federal government standards. Other states may also adopt California's standards if they choose. The waiver provision was added to the Federal Air Quality Act (one of the precursors of the current Clean Air Act) in 1967 because of California's severe air pollution problems and because the state had already established its own emission standards for mobile sources. California has used this waiver provision regularly to establish and enforce standards for vehicle emissions more stringent than those required by federal law. California must, however, request a waiver of federal pre-emption and the EPA Administrator must approve it before California or any other state can implement such standards. Since being given this authority, California has requested and been granted waivers more than 50 times.

CLEAN AIR ISSUES IN THE 111TH CONGRESS
James E. McCarthy. Congressional Research Service (CRS). January 16, 2009. 24 pages.
http://assets.opencrs.com/rpts/R40145_20090116.pdf
Attention to clean air issues in the 111th Congress is expected to focus on climate change and the regulation of emissions from electric utilities. In the last Congress, at least half a dozen bills were introduced to address electric utility air emissions and about a dozen bills addressed the regulation of greenhouse gases (GHGs) economy-wide. None passed. The Lieberman-Warner bill to establish a cap-and-trade system for GHGs (S. 2191/S. 3036) was reported by the Environment and Public Works Committee and debated briefly on the Senate floor. Bills similar to this are expected to have a high priority in the new Congress. Throughout the Bush years, states interested in setting more stringent environmental standards developed and implemented regulations that went well beyond the requirements of federal law. Of particular interest during the last year has been California’s request for a waiver to control greenhouse gas emissions from cars and light trucks. EPA denied that waiver request in March 2008. The Obama Administration plans to reverse that decision.

ISSUES IN GREEN BUILDING AND THE FEDERAL RESPONSE: AN INTRODUCTION
Eric A. Fischer. Congressional Research Service (CRS). January 16, 2009. 34 pages.
http://assets.opencrs.com/rpts/R40147_20090116.pdf
The construction, characteristics, operation, and demolition of buildings are increasingly recognized as a major source of environmental impact. Without significant transformation of building construction and operations, such impacts are expected to increase with population growth and changes in other demographic and economic factors. One strategy for achieving that transformation is most widely known

by the term green building. The term is used differently, however, by different proponents and practitioners, denoting a continuum of practices, from those differing minimally from standard practices, to those aimed at providing buildings with a minimum of environmental impact. Among the questions the 111th Congress and the Obama Administration may face with respect to such issues are the following: How well are current green building programs working? How effective are current methods for coordinating the green building activities of different agencies? To what extent and by what means should Congress extend its efforts to facilitate and support the adoption and effective implementation of green building measures? What priorities should Congress give to the different elements of green building? What actions should Congress do to facilitate the growth of the scientific and technical knowledge base relating to green building?

ATMOSPHERIC AEROSOL PROPERTIES AND CLIMATE IMPACTS
U.S. Climate Change Science Program and Subcommittee on Global Change Research. January 2009. 128 pages.
http://downloads.climatescience.gov/sap/sap2-3/sap2-3-final-report-all.pdf
This report critically reviews current knowledge about global distributions and properties of atmospheric aerosols, as they relate to aerosol impacts on climate. It assesses possible next steps aimed at substantially reducing uncertainties in aerosol radiative forcing estimates. Current measurement techniques and modeling approaches are summarized, providing context. The objectives of this report are to promote a consensus about the knowledge base for climate change decision support, and to provide a synthesis and integration of the current knowledge of the climate-relevant impacts of anthropogenic aerosols for policy makers, policy analysts, and general public, both within and outside the U.S government and worldwide.

STRATEGIES FOR THE COMMERCIALIZATION AND DEPLOYMENT OF GREENHOUSE GAS INTENSITY-REDUCING TECHNOLOGIES AND PRACTICES
Committee on Climate Change Science and Technology Integration. U.S. Climate Change Technology Program. January 2009. 190 pages.
http://www.climatetechnology.gov/Strategy-Intensity-Reducing-Technologies.pdf
New technologies will be a critical component -- perhaps the critical component -- of U.S. efforts to tackle the related challenges of energy security, climate change, and air pollution, all the while maintaining a strong economy. But just developing new technologies is not enough. The ability to accelerate the market penetration of clean energy, enabling, and other climate-related technologies will have a determining impact on the ability to slow, stop, and reverse the growth in greenhouse gas (GHG) emissions.

THINK TANKS AND RESEARCH CENTERS:

The opinions expressed in these publications do not necessarily reflect the views of the U.S. Government

VISION 2010: PRESIDENT OBAMA'S BUDGET, CLEAN ENERGY AND THE ENVIRONMENT
Environment America. Research & Policy Center. April 2009. 52 pages.
http://www.environmentamerica.org/reports/other-issues/more-issues/vision-2010-president-obamas-budget-clean-energy-and-the-environment

President Obama has in two short months set the nation in a new direction when it comes to transitioning to a clean energy economy, stopping global warming and protecting the environment. This report estimates the state-by-state distribution of the part of the president's proposed Fiscal Year 2010 federal budget that would be to transition to clean energy by requiring global warming polluters to pay, clean up toxic waste, prevent water pollution, and spur clean energy businesses in the United States.

ENERGY EFFICIENCY IN BUILDINGS: A GLOBAL ECONOMIC PERSPECTIVE
Trevor Houser. Peterson Institute for International Economics. Policy Brief. April 2009. 5 pages.
http://www.petersoninstitute.org/publications/pb/pb09-8.pdf
Improving energy efficiency in buildings is often heralded as the cheapest way to cut emissions, with a wealth of individual investment options available at negative cost. Few studies, however, have attempted to estimate the cost of completely overhauling the building sector to meet long-term emission-reduction goals. This study finds that while achieving aggressive, whole-building improvements in energy efficiency is more expensive than studies of individual building components would suggest, average abatement costs in buildings are still cheaper than in other sectors. Barriers to efficiency investment in the building sector, however, make it difficult to take advantage of these low-cost abatement opportunities, even at a relatively high carbon price. New approaches to financing are important in overcoming these investment barriers, but these will need to be coupled with improved standards for building construction, government spending to buy down investment "first costs," and improved awareness of potential energy savings among households and firms.

HOTTER FIELDS, LOWER YIELDS: HOW GLOBAL WARMING COULD HURT AMERICA'S FARMS
Timothy Telleen-Lawton. Environment America. Research & Policy Center. April 2009. 20 pages.
http://www.environmentamerica.org/home/reports/report-archives/global-warming-solutions/global-warming-solutions/hotter-fields-lower-yields
America's reliance on fossil fuels is fueling global warming and causing a host of other environmental, economic, and security problems. Not all the effects of global warming will be bad for agriculture; growing seasons will be longer, and increased carbon dioxide levels encourage plant growth. But global warming will make some of the challenges that agriculture faces significantly worse, including increasing temperatures, more damaging storms, ozone pollution, and spreading pests, weeds, and diseases. This report examines the impact of global warming on corn, America's largest crop, which is particularly vulnerable to productivity losses from the higher temperatures expected from global warming.

LEGAL FORM OF A NEW CLIMATE AGREEMENT: AVENUES AND OPTIONS
Daniel Bodansky. Pew Center on Global Climate Change. April 2009. 8 pages.
http://www.pewclimate.org/docUploads/legal-form-of-new-climate-agreement-paper.pdf
Parties to the UN Framework Convention on Climate Change (UNFCCC) and parties to its related legal instrument, the Kyoto Protocol, are presently engaged in dual track negotiations with the aim of reaching a new agreement or agreements at the UN Climate Change conference to be held in Copenhagen in December 2009. In 2005, pursuant to Article 3.9 of the Protocol, Kyoto parties established an Ad Hoc Working Group on Further Commitments for Annex I Parties under the Kyoto Protocol (AWG-KP) to consider Annex I commitments for the period beyond 2012, when the Protocol's first commitment period ends. This paper identifies the potential legal avenues for an outcome or outcomes under the Bali Action Plan and the Kyoto Protocol Article 3.9 process.

MEASUREMENT, REPORTING, AND VERIFICATION IN A POST-2012 CLIMATE AGREEMENT
Clare Breidenich and Daniel Bodansky. Pew Center on Global Climate Change. April 2009. 40 pages.
http://www.pewclimate.org/docUploads/mrv-report.pdf
Measurement, reporting, and verification (MRV) can serve a wide range of purposes in a new climate agreement. MRV can provide an important means of tracking parties' progress individually and collectively toward the Convention's ultimate objective. The very process of measurement can facilitate parties' actions by establishing baselines and helping to identify mitigation potentials. The reporting of actions can allow for their recognition internationally. The review or verification of parties' actions can enhance action through expert advice on opportunities for improvement. MRV could play a particular role in the linkage between developing countries' action and support for those actions. Finally, credible MRV can strengthen mutual confidence in countries' actions and in the regime, thereby enabling a stronger collective effort.

EVALUATING OPTIONS FOR U.S. GREENHOUSE-GAS MITIGATION USING MULTIPLE CRITERIA
Nicholas Burger, Liisa Ecola, Thomas Light and Michael Toman. The Rand Corporation. April 2009. 54 pages.
http://www.rand.org/pubs/occasional_papers/2009/RAND_OP252.pdf
Choosing a set of policy responses to mitigate greenhouse gases (GHGs) responsible for climate change is one of the great challenges that the United States faces in the coming years. Many policy options emphasize overall cost-effectiveness in reducing GHG emissions. In the search for options that are effective and politically feasible, however, other concerns have comparable importance. Mitigating GHGs in practice will require balancing cost-effectiveness and other objectives that reflect the institutional and political realities of passing major federal legislation with widespread impacts on U.S. producers and consumers.

BENEFITS OF ORGANIC AGRICULTURE AS A CLIMATE CHANGE ADAPTATION AND MITIGATION STRATEGY FOR DEVELOPING COUNTRIES
Adrian Muller. Resources for the Future (RFF). Environment for Development Discussion Paper 09-09. April 2009. 19 pages.
http://www.rff.org/RFF/Documents/EfD-DP-09-09.pdf
Organic agriculture, as an adaptation strategy to climate change and variability, is a concrete and promising option for rural communities and has additional potential as a mitigation strategy. Adaptation and mitigation based on organic agriculture can build on well-established practice because organic agriculture is a sustainable livelihood strategy with decades of use in several climate zones and under a wide range of specific local conditions. The financial requirements of organic agriculture as an adaptation or mitigation strategy are low. Further research is needed on yields in organic agriculture and its mitigation and sequestration potential. Other critical points are information provision and institutional structures such as market access.

THE INCIDENCE OF U.S. CLIMATE POLICY ALTERNATIVE USES OF REVENUES FROM A CAP-AND-TRADE AUCTION

Dallas Burtraw, Richard Sweeney, and Margaret Walls. Resources for the Future (RFF). Discussion Paper 09-17. April 2009. 60 pages.
http://www.rff.org/RFF/Documents/RFF-DP-09-17.pdf
Federal policies intended to slow global warming would impose potentially significant costs on households, and the costs would vary depending on the policy approach used. This paper evaluates the effects of a carbon dioxide (CO2) cap-and-trade program on households in each of 11 regions of the country and sorted into annual income deciles. We find important variation in the incidence (the distribution of cost) of the policy. The most important feature that affects households is how the policy distributes the value created by placing a price on CO2 emissions.

ALTERNATIVE APPROACHES TO COST CONTAINMENT IN A CAP-AND-TRADE SYSTEM
Harrison Fell and Richard D. Morgenstern. Resources for the Future (RFF). Discussion Paper 09-14. April 2009. 33 pages.
http://www.rff.org/RFF/Documents/RFF-DP-09-14.pdf
The authors compare several emissions reduction instruments, including quantity policies with banking and borrowing, price policies, and hybrid policies (safety valve and price collar), using a dynamic model with stochastic baseline emissions. The instruments are compared under the design goal of obtaining the same expected cumulative emissions across all options. Based on simulation analysis with the model parameterized to values relevant to proposed U.S. climate mitigation policies, they find that restrictions on banking and borrowing, including the provision of interest rates on the borrowings, can severely limit the value of the policy, depending on the regulator-chosen allowance issuance path.

SHOULD THE OBAMA ADMINISTRATION IMPLEMENT A CO2 TAX?
Ian W.H. Parry. Resources for the Future (RFF). Issue Brief 09-05. April 2009. 9 pages.
http://www.rff.org/RFF/Documents/RFF-IB-09-05.pdf
There is an overwhelming economic case for the Obama administration to impose, as soon as possible, a price on carbon dioxide (CO2) and other greenhouse gas (GHG) emissions. But how high should the price be? Should it be implemented through an emissions tax or a cap-and-trade system? And how should the policy be designed?

POISON ON PETS II: TOXIC CHEMICALS IN FLEA AND TICK COLLARS
Miriam Rotkin-Ellman and Gina Solomon. Natural Resources Defense Council (NRDC). Issue Paper. April 2009. 19 pages.
http://www.nrdc.org/health/poisonsonpets/files/poisonsonpets.pdf
Americans spend more than $1 billion each year on products designed to kill fleas and ticks on household pets, especially dogs and cats. While some of these products are safe, others leave harmful chemical residues on pets' fur and in homes. These chemicals are highly hazardous to animals and humans, can damage the brain and nervous system, and cause cancer. This reports details a first-of-its-kind study showing that high levels of pesticide residue can remain on a dog's or cat's fur for weeks after a flea collar is put on an animal. Residue levels produced by some flea collars are so high that they pose a risk of cancer and damage to the neurological system of children up to 1,000 times higher than the EPA's acceptable levels.

RESILIENT COASTS: A BLUEPRINT FOR ACTION

The H. John Heinz III Center for Science, Economics and the Environment and Ceres. April 2009. 9 pages.
http://www.heinzctr.org/publications/PDF/Resilient_Coasts_Blueprint_Final.pdf
Powerful storms are wreaking increasing havoc along the world's coasts, as Hurricane Katrina and Cyclone Nagris indelibly demonstrated. Of particular interest are the commonsense and cost-effective steps the U.S. can take to drastically reduce such risks and their associated economic impacts. Wetlands provide an estimated $23.2 billion each year of storm surge and flood protection along the coastlines, according to a study by the University of Vermont. Yet the combined pressures of climate change and development have led to the systematic depletion of protective wetlands. Clearly, the resiliency of coastal populations and ecosystems go hand in hand. The need to adapt is also an opportunity to restore coastal ecosystems, which are a critical complement to defensive infrastructure.

GLOBAL FINANCIAL STRUCTURE AND CLIMATE CHANGE
John Whalley and Yufei Yuan. National Bureau of Economic Research (NBER). Working Paper No. 14888. April 2009. 25 pages.
http://www.nber.org/papers/w14888.pdf?new_window=1
This paper analyzes the medium to long-term implications of global warming for the evolution of global financial structures. Scientific literature reports that greenhouse gas emissions generated by human activities will very possibly lead to global temperature increase of 1-5 degrees Celsius by 2050. This will cause a dramatic increase in global risks to human life. The response to this will be the seeking-out of financial innovation by major forms, primarily in the area of insurance, but also in the diversification of asset holdings. This paper suggests that, with modest climate changes of 1-2 degrees Celsius, the global insurance market will expand dramatically. Under more extreme climate change scenarios, however, the entire global financial structure will undergo major changes, with a re-focusing of major financial activity away from intermediation between borrowers and lenders and the facilitation of the accumulation of assets, and towards a focus on insurance arrangements and the diversification of risks associated with climate change.

COURTING DISASTER: HOW THE SUPREME COURT HAS BROKEN THE CLEAN WATER ACT AND WHY CONGRESS MUST FIX IT
Earthjustice, Environment America, Clean Water Action, National Wildlife Federation, Natural Resources Defense Council, Sierra Club, and Southern Environmental Law Center. April 2009. 44 pages.
http://www.sierraclub.org/cleanwater/reports_factsheets/2009-04-courting-disaster.pdf
In 1972, Congress passed an expansive Clean Water Act to protect all "waters of the United States." For almost 30 years, both the courts and the agencies responsible for administering the Act interpreted it to broadly protect our Nation's waters. However, in two recent decisions, Solid Waste Agency of Northern Cook County v. U.S. Army Corps of Engineers (SWANCC) in 2001 and Rapanos v. United States in 2006, the Supreme Court misinterpreted the law and placed pollution limitations for many vital water bodies in doubt. These decisions shattered the fundamental framework of the Clean Water Act. Today, many important waters -- large and small -- lack critical protections against pollution or destruction. The case studies in this report provide telling examples of how dire the situation is and how urgent it is for Congress to take action.

AGRICULTURE AND CLIMATE CHANGE: AN AGENDA FOR NEGOTIATION IN COPENHAGEN
Gerald C. Nelson. International Food Policy Research Institute (IFPRI). March 2009. 2 pages.
http://www.ifpri.org/2020/focus/focus16/Focus16_01.pdf
If fundamental climate change mitigation and adaptation goals are to be met, international climate negotiations must include agriculture. Agriculture and climate change are linked in important ways, and this brief focuses on three: climate change will have large effects on agriculture, but precisely where and how much are uncertain, agriculture can help mitigate climate change, and poor farmers will need help adapting to climate change. As negotiations get underway in advance of the meeting of the 15th Conference of Parties of the UN Framework Convention on Climate Change in Copenhagen in December 2009, this brief suggests negotiating outcomes for both mitigation and adaptation funding that will support climate change goals while enhancing the well-being of people who manage and depend on agriculture, especially in the developing world.

A RISING TIDE OF OCEAN DEBRIS: 2009 REPORT
Ocean Conservancy. March 2009. 64 pages.
http://www.oceanconservancy.org/pdf/A_Rising_Tide_full_lowres.pdf
The disheartening amount of trash afloat in the sea, littering beaches, and piling up on the sea floor affects the health of Earth's life support system, the ocean, and all the living things in it. Marine debris is more than a blemish on Nature, it is a potential threat to our food supply, to tourism and economic activity, to marine wildlife and ecosystems, and to our personal health. It even relates to the impacts of climate change. But there's good news: marine debris is a problem we can readily solve.

HUNGRY OCEANS: WHAT HAPPENS WHEN THE PREY IS GONE?
Oceana. March 2009. 40 pages.
http://oceana.org/fileadmin/oceana/uploads/Hungry_oceans/hungry_oceans_OCEANA_01.pdf
Scientists are finding evidence of widespread malnutrition in commercial and recreational fish, marine mammals, and seabirds because of the global depletion of the small fish they need to survive, according to this report. These "prey fish" underpin marine food webs and are being steadily exhausted by heavy fishing, increasing demand for aquaculture feed. Changing ocean temperatures and currents caused by climate change also make prey fish populations more vulnerable.

INTEGRATING U.S. CLIMATE, ENERGY, AND TRANSPORTATION POLICIES: PROCEEDINGS OF THREE WORKSHOPS
Liisa Ecola, Scott Hassell, Michael Toman and Martin Wachs. The Rand Corporation. March 2009. 54 pages.
http://www.rand.org/pubs/conf_proceedings/2009/RAND_CF256.pdf
In June 2008, the RAND Corporation convened three workshops on policies for mitigating climate change. These workshops brought together representatives of government, industry, advocacy groups, and the research community, who hold different perspectives on what the goals of climate change mitigation policy should be and which strategies should be implemented to achieve them. Addressing the interconnection of climate change mitigation policy with the key sectors of energy and transportation will be a major challenge for the United States in the coming years. The competing interests of these groups sometimes hamper progress on this front. Bringing them together enabled them to share different perspectives and to identify some common points of view on such issues as technological innovation;

federal, state, and local roles; potential legislative and regulatory solutions; international cooperation; and public engagement.

CLIMATE CHANGE AND RISK MANAGEMENT: CHALLENGES FOR INSURANCE, ADAPTATION, AND LOSS ESTIMATION
Carolyn Fischer and Alan K. Fox. Resources for the Future (RFF). Discussion Paper 09-03. March 2009. 38 pages.
http://www.rff.org/RFF/Documents/RFF-DP-09-03-REV.pdf
Adapting to climate change will not only require responding to the physical effects of global warming, but will also require adapting the way we conceptualize, measure, and manage risks. Climate change is creating new risks, altering the risks we already face, and also, importantly, impacting the interdependencies between these risks. In this paper the authors focus on three particular phenomena of climate related risks that will require a change in our thinking about risk management: global micro-correlations, fat tails, and tail dependence. Consideration of these phenomena will be particularly important for natural disaster insurance, as they call into question traditional methods of securitization and diversification.

WATER QUALITY TRADING PROGRAMS: AN INTERNATIONAL OVERVIEW
Mindy Selman. World Resources Institute (WRI). Issue Brief. March 2009. 16 pages.
http://pdf.wri.org/water_trading_quality_programs_international_overview.pdf
Water quality trading is a market-based instrument that is gaining popularity as a mechanism to cost-effectively meet water quality goals. It is premised on the fact that the costs to reduce pollution differ among individual entities depending on their size, location, scale, management, and overall efficiency. Trading allows sources with high abatement costs to purchase pollution discharge reductions from sources that have lower abatement costs. Entities with lower abatement costs are able to economically lower their pollution discharges beyond regulated or permitted levels, enabling them to sell their excess reductions to entities with higher costs. Water quality trading is most commonly applied to nutrients (such as nitrogen and phosphorus), but has also been applied to temperature, selenium, and sediment.

BEYOND CARBON FINANCING: THE ROLE OF SUSTAINABLE DEVELOPMENT POLICIES AND MEASURES IN REDD
Florence Daviet. World Resources Institute (WRI). Climate and Forests Policy Series. March 2009. 16 pages.
http://pdf.wri.org/beyond_carbon_financing.pdf
For many experts, the term REDD (for "reducing emissions from deforestation and forest degradation in developing countries") has become synonymous with a carbon-financing approach, in which the developing countries' reduction of emissions from forests is supported by the developed countries' purchase of carbon credits, which they can use to meet their own emissions reduction or other obligations. This report looks beyond quantifying emissions reductions at a more flexible approach for recognizing mitigation actions being taken by developing countries in the forest sector. This approach ensures that countries with high historical emissions are not necessarily favored for support, and it allows for a broader set of measurable, reportable, and verifiable (MRV) criteria to capture countries' efforts to change the drivers of deforestation and forest degradation.

THE STATE OF THE BIRDS 2009
Various contributors. March 2009. 36 pages.
http://www.stateofthebirds.org/pdf_files/State_of_the_Birds_2009.pdf
Birds are a priceless part of America's heritage. They are beautiful, they are economically important -- and they reflect the health of the U.S. environment. This report reveals troubling declines of bird populations during the past 40 years -- a warning signal of the failing health of the U.S. ecosystems. At the same time, the authors see heartening evidence that strategic land management and conservation action can reverse declines of birds. This report calls attention to the collective efforts needed to protect nature's resources for the benefit of people and wildlife.

CARBON OFFSETS: NO SURE BET TO PREVENT CLIMATE CHANGE
H. Sterling Burnett. National Center for Policy Analysis (NCPA). Brief Analysis No. 646. February 24, 2009. 2 pages.
http://www.ncpa.org/pdfs/ba646.pdf
The 1997 Kyoto Protocol requires developed countries to reduce greenhouse gas emissions to below 1990 levels. In 2005, the European Union implemented a "cap-and-trade" scheme based on an arguably successful U.S. program to lower sulfur dioxide emissions. A second way a country (or company) can meet its emission targets is to pay others to reduce their emissions. To facilitate this process, the United Nations created the Clean Development Mechanism (CDM), an international market where buyers who need to offset their emissions can purchase carbon credits from developing countries -- effectively paying for emission reductions by others. According to the authors, these programs have, however, not lowered overall emissions in developed countries.

CLIMATE CHANGE POLICY: SHOULD WE TAX THE POOR TO HELP THE RICH?
David R. Henderson. National Center for Policy Analysis (NCPA). Brief Analysis No. 644. February 18, 2009. 2 pages.
http://www.ncpa.org/pdfs/ba644.pdf
Claims that human-caused global warming will raise average temperatures by 2oC to 5oC over the next 100 years and cause serious harm to society are controversial. However, assuming that global warming will be a big problem, there are two important questions: What should be done about it? When should it be done? The two main approaches are to make major adjustments now or gradually through time to reduce warming or mitigate its effects. Thus, thinking about efforts to combat global warming requires comparing costs today with potential benefits 100 years or more in the future.

A GREEN GLOBAL RECOVERY? ASSESSING US ECONOMIC STIMULUS AND THE PROSPECTS FOR INTERNATIONAL COORDINATION
Trevor Houser, Shashank Mohan, and Robert Heilmayr. Peterson Institute for International Economics and World Resources Institute (WRI). Policy Brief. February 2009. 21 pages.
http://www.petersoninstitute.org/publications/pb/pb09-3.pdf
Policymakers are hoping to direct government spending over the next two years in a way that not only generates short-term economic growth and employment but also addresses long-term policy goals sidelined by the current crisis. Energy and environmental objectives are chief among these goals, as evidenced by the considerable attention given to the notion of a green economic recovery by policymakers and the press. This Policy Brief provides a framework for evaluating ways to meet energy and climate-policy goals as part of an economic recovery effort, assesses a range of policy options

currently under consideration, and discusses the prospects for coordinating U.S. actions with those of other major economies for broader effect.

COMPARING POLICIES TO COMBAT EMISSIONS LEAKAGE: BORDER TAX ADJUSTMENTS VERSUS REBATES
Carolyn Fischer and Alan K. Fox. Resources for the Future (RFF). Discussion Paper 09-02. February 2009. 34 pages.
http://www.rff.org/RFF/Documents/RFF-DP-09-02.pdf
The authors explore conditions determining which anti-leakage policies might be more effective complements to domestic greenhouse gas emissions regulation. They consider four policies that could be combined with unilateral emissions pricing to counter effects on international competitiveness: a border tax on imports, a border rebate for exports, full border adjustment, and a domestic production rebate (as might be implemented with output-based allocation of emissions allowances). Each option faces different potential legal hurdles in international trade law; each also has different economic impacts.

BREAKING THE LOGJAM: ENVIRONMENTAL REFORM FOR THE NEW CONGRESS AND ADMINISTRATION
David Schoenbrod, Richard B. Stewart and Katrina M. Wyman. American Enterprise Institute (AEI). Project Report. February 2009. 32 pages.
http://www.aei.org/docLib/20090311_BreakingLogjamReport.pdf
Despite many earlier accomplishments, the federal environmental protection system is not up to the environmental problems of the present. It is fragmented and too complicated to administer well. Perhaps most important, the current system slows down environmental progress by preventing regulators and private actors from adopting innovative strategies to deal with longstanding and newly emerging environmental problems. While a green stimulus package would promote near-term green investments using the power of the federal purse, environmental law reform could incentivize fundamental innovation by using new tools to enlist the energies of millions of Americans to improve environmental quality.

THE GREEN MOVEMENT AND THE CHALLENGE OF CLIMATE CHANGE
Lee Lane. American Enterprise Institute (AEI). Energy and Environment Outlook No. 1. February 2009. 5 pages.
http://www.aei.org/docLib/20090226_0123914EEOLane_g.pdf
To produce net benefits, climate policy will have to make careful trade-offs between the costs and benefits of greenhouse gas (GHG) emission controls. Many environmentalists regard cost-benefit trade-offs as taboo -- a strongly negative reaction that can block rational decision-making. Some green groups, however, have now embraced so-called cap-and-trade emission controls. At least one recent analysis regards the green groups' move toward cap-and-trade as a sign that they are rising above the taboo response to embrace economic reasoning. A closer look shows that there may be less to this story than advertised.

BIRDS AND CLIMATE CHANGE: ECOLOGICAL DISRUPTION IN MOTION
National Audubon Society . February 2009. 16 pages.
http://www.audubon.org/news/pressroom/bacc/pdfs/Birds%20and%20Climate%20Report.pdf

The northward and inland movement of North American birds provides new and powerful evidence that global warming is having a serious impact on natural systems, according to this report. Population shifts among individual species are common, fluctuate, and can have many causes. Audubon scientists, however, confirm the ongoing trend of movement by some 177 species -- closely correlated to long-term winter temperature increases -- reveals an undeniable link to the changing climate. These findings signal the need for dramatic policy changes to combat pervasive ecological disruption.

COMMON CHALLENGE, COLLABORATIVE RESPONSE: A ROADMAP FOR U.S.-CHINA COOPERATION ON ENERGY AND CLIMATE CHANGE
Asia Society Center on U.S.-China Relations and Pew Center on Global Climate Change. January 2009. 58 pages.
http://www.pewclimate.org/docUploads/US-China-Roadmap-Feb09.pdf
The world faces no greater challenge in the 21st century than arresting the rapidly increasing accumulation of greenhouse gases in the atmosphere that cause climate change. The two largest producers of these gases are the United States and China. Their cooperation is essential if there is to be a solution to the daunting climate change challenge. If the United States and China can become active catalysts in bringing about a strategic transformation to a low-carbon, sustainable global economy, the world will take a giant step forward in combating climate change. The United States and China will also edge closer to energy security, protecting their environments and assuring greater prosperity for their citizens. Equally important, they will also succeed in building a far more stable and cooperative foundation for U.S.-China relations as a whole.

DOUBLE JEOPARDY: WHAT THE CLIMATE CRISIS MEANS FOR THE POOR
Vinca LaFleur, Nigel Purvis and Abigail Jones. Brookings Institution. Global Economy and Development Program. January 2009. 44 pages.
http://www.brookings.edu/%7E/media/Files/rc/reports/2009/02_climate_change_poverty/02_climate_change_poverty.pdf
When faced with rising prices of food or fuel, the wealthy can cope by curbing consumption or dipping into savings. But for the poorest families, which spend 50 to 80 percent of their income just to get enough food to survive, rising prices force life-altering choices like pulling children out of school or selling precious livestock -- choices that tighten the shackles of poverty beyond any chance of escape. Similarly, the wealthy can avoid encroaching threats to their physical safety by investing in protective infrastructure or by moving to another location. But the global poor lack the resources to adapt or retreat -- and the citizens of the world's fifty-one small developing island states have literally nowhere to go.

CLIMATE CHANGE AND POLICY CONSIDERATIONS: NEW ROLES FOR EARTH SCIENCE
Molly K. Macauley. Resources for the Future (RFF). Issue Brief 09-02. January 2009. 12 pages.
http://www.rff.org/RFF/Documents/RFF-IB-09-02_WEB.pdf
Earth observations data play a unique and critical role in supporting assessments and policy decisions related to global climate change. Space-derived Earth observations, the subject of this issue brief, have already figured prominently in understanding the science of climate change. During the coming years, these data will become even more useful for informing not only science, but policy -- helping decision-makers to formulate policy, as well as understand the outcomes of climate-related policy decisions.

CLIMATE CHANGE: TOP 10 PRECEPTS FOR U.S. FOREIGN POLICY
Daniel Bodansky. Resources for the Future (RFF). Issue Brief 09-01. January 2009. 21 pages.
http://www.rff.org/RFF/Documents/IB%2009-01.pdf
Climate change presents both a challenge and an opportunity for U.S. foreign policy. Because the benefits of taking action depend on reciprocal efforts by others, international cooperation is essential. Resolving the problem will require a global effort of unprecedented scale, involving fundamental changes in the ways that countries produce energy, transport people and products, grow food, and manufacture goods. But many are still reluctant to act, and existing international institutions to organize and enforce cooperation remain weak. Therefore, breaking the international logjam on climate change poses a major challenge.

HEALTHIER OCEANS, HEALTHIER ECONOMIES
Oceana and International Centre for Trade and Sustainable Development (ICTSD). Info Note Number 7. January 2009. 8 pages.
http://oceana.org/fileadmin/oceana/uploads/dirty_fishing/Reports/ICTSD_Oceana_Jan09_FINAL.pdf
For millennia people have relied on the bounty of the seas to feed themselves and to support economic growth. But the buildup in fleet capacity, particularly since World War II, and the deployment of increasingly powerful fishing technologies have depleted fish stocks worldwide. Fisheries resource management has been inadequate to forestall the global decline, with more than three quarters of all fish stocks now either fully exploited or over-exploited. Many scientists have warned of widespread collapses in fish populations within decades. The depletion of fisheries stocks has far-reaching socio-economic consequences.